Epistemology of Classification with Emphasis on Emile Durkheim and Marcel Mauss

Hjørland, Birger

Publication date:
2018

CHAPITRE 1

Epistemology of Classification with Emphasis on Emile Durkheim and Marcel Mauss

BIRGER HJØRLAND

Department of Information Studies, University of Copenhagen (Denmark)

1. Introduction

In 1903 Emile Durkheim and Marcel Mauss published a long journal article *De Quelques Formes Primitives de Classification. Contribution à l'Étude des Representations Collectives* (in 2010 translated to English and published in book form with an important introduction by Rodney Needham). The article is not without serious flaws and has been heavily criticized as representing "sociologism." We shall not here review this criticism, which is well covered by Rodney Needham's introduction in the English translation [DUR 10] and by Bloor [BLO 82]. This book is an important contribution to the difficult field of the theory and epistemology of classification, in particular the role of the classifier and his or her sociocultural background in classifying objects.

2. Approaches to classification

Before considering Durkheim and Mauss we have to look at the basic approaches to classification. In Hjørland [HJO 17, Section 4.2c, p. 106-110] four basic epistemologies of classification were presented: 4.2cα Rationalism; 4.2cβ Empiricism; 4.2cγ Historicist approaches; 4.2cδ Pragmatic and critical approaches. The first two approaches may be termed positivist epistemologies and they try to eliminate the role of the classifier (=the subjectivity of classification), while the last

two, which may be termed "social epistemologies", acknowledge the subjectivity of classification, for example by claiming that all classification is influenced by the traditions or paradigms in which the classifier has been socialized.

One of the most influential criticism of the positivist approaches in the 20th Century was Thomas Kuhn's *The Structure of Scientific Revolutions* [KUH 62]. Since then, issues related to what is here called social epistemology has been in the forefront and this has made Durkheim and Mauss' work important. Durkheim and Mauss' basic claim was that the classification of things reproduces a pattern of social arrangements of the classifiers more than a pattern of the things themselves. Although some serious problems in their view and methodology has been pointed out (e.g. by Needham in [DUR 10] and by Bloor [BLO 82]), the basic idea that classifications reflects the societies in which they are produced is an important thesis today.

The term *social epistemology* (SE) originated in library science in an article about classification by library scientist Jesse Shera, who wrote:

> "Even a cursory examination of the history of classification of the sciences emphasized the extent to which any attempt to organize knowledge is conditioned by the social epistemology of the age in which it was produced. This dependency of classification theory upon the state of the sociology of knowledge will doubtless be even more strongly confirmed in the future. Here, then, is an implicit denial of Bliss' faith in the existence of a 'fundamental order of nature,' a rejection of the belief that there is a single, universal, logically divided classification of knowledge." [SHE 51, p. 82]

Shera meant that bibliographic classification (and classification generally) does not reflect a fundamental order of nature, but is determined views or theories, that develops historically. Formerly he wrote:

> "If one may learn anything from such a cursory examination of the history of classification it is that every scheme is conditioned by the intellectual environment of its age or time; that there is not, and can never be, a universal and permanent classification that will be all things to all men; and that each generation may built upon the work of its predecessors, but must create its own classification from the materials that it has at hand and in accordance with its own peculiar needs" [SHE 51, p. 77].

Shera's sociological view (like that of Durkheim and Mauss) predated Kuhn and the social turn in epistemology, and this fact may have hindered the acceptance of

their views. Kuhn's influence gave rise to what is here termed *social epistemology* but also to *social constructivism*, and some authors consider these two terms as synonyms (e.g. [SAD 15, p. 518-550]). However, social constructivism is a much criticized position, and Kuhn famously rejected the *Strong Programme* (which is an important part of social constructivism) as "deconstruction gone mad" [KUH 00, p. 110], and therefore, these two positions are here considered to be different: While social epistemology acknowledge the socio-cultural influence or determinance of knowledge production, it nonetheless recognize an reality, whereas

> "Strong social constructivism claims further that the entities themselves to which these representations refer are socially constructed. In other words, not only are scientific representations of certain biochemical substances socially constructed, but the substances themselves are socially constructed." [GOL 15, Section 5.1]

However, according to Kuhn: "nature cannot be forced into an arbitrary set of conceptual boxes. On the contrary . . . the history of the developed sciences shows that nature will not indefinitely be confined in any set which scientists have constructed so far" [KUH 70, p. 263]. The world provides ''resistance'' to our conceptualizations in the form of anomalies; that is, situations in which it becomes clear that something is wrong with the structures given to the world by our concepts. In this way, Kuhn's view may be interpreted as (pragmatic) realist. This view is here interpreted as represents a social epistemological view, but not a social constructivist one.

3. Durkheim and Mauss and social constructivism

Bloor [BLO 82, p. 269] argued that the network theory of knowledge developed by Mary Hesse provides plausibility to the idea of Durkheim and Mauss [DUR 03]. The network theory says that knowledge is not built on discrete, self-sufficient facts which maintain their individuality and status in isolation from one another. Rather knowledge is organic, and the organization of the whole takes precedence over the parts, overseeing their adjustment and correction. But then Bloor adds the following comment:

> "... a classificatory system is not, and cannot be, determined by the way the world is. There is no such thing as a natural or uniquely objective classification." [BLO 82, p. 269]

David Bloor is a founding figure in *the Strong Programme*, and the quote above may be considered the point of view of social constructivism on classification. The

opposite view is that a classificatory system should be determined by the way the world is (a realist view on classification).

Philosopher Finn Collin discussed a social constructivist view of classification, which he formulated in this way:

> ... to isolate a certain kind of thing is the same process as classifying individual things. And classification is a matter of sorting things into groups, the members of which are more similar to each other than to items outside the group. However, things are only similar or dissimilar in certain respects [...]. Classifications are not objective divisions, inherent in the nature of things, but are structures we impose upon nature. [...] *kinds* of things are indeed human creations. [COL 93, p. 29, italics in original]

He then wrote:

"I believe this reasoning is mistaken. What follows from the premises is a less radical conclusion" [COL 93, p. 29] Later, he summed up his argument:

> ... the nominalist argument mistakes a valid anti-essentialist point for an anti-realist one. It is true that there is not, among the true descriptions of a thing, one which is privileged, in the sense that any classification of the thing has to be based upon that particular description. There is no uniquely correct classification of a thing, one that shows what the thing really is, rendering alternative classifications somehow misleading or inappropriate.
>
> But it is a mistake to infer from this that things do not in themselves belong to any classifications at all and that things only come to belong to classes when we place them there. Once we relativise similarity and dissimilarity to particular aspects of things, similarity and dissimilarity turn out to be objective, although relational, properties of things, and the predicates that are defined by the equivalency classes of things turn out to be genuine properties of those things. Reality possesses *all* the properties attributed to it in these alternative descriptions. [COL 93, p. 43, italics in original]

The differences between the social constructivist view (as described by Collin) and Collin's own realist view seems, however, not to be that big. If objects have an unlimited number of properties of things, the properties that are selected for classification is a human choice. That choice must be justified pragmatically by the purpose and fruitfulness of the classification.

Therefore, it seems correct that "Classifications are not objective divisions, inherent in the nature of things, but are structures we impose upon nature. [...] kinds of things are indeed human creations." However, this claim is not identical with Bloor's (op.cit.) claim that "... a classificatory system is not, and cannot be, determined by the way the world is." Yes, classifications may be determined by the way the world is and at the same time selected and constructed to serve human needs. If classifications do not reflect the world as it is, the world will, with the words of Kuhn, provide ''resistance'' to our conceptualizations and classifications.

Durkheim and Mauss are right that different classifications reflects the different societies and cultures in which they are produced, but that is not a purely idealist claim that they do not at the same time reflect objective properties. Nobes and Stadler [NOB 13] examined accounting classifications and made the first meta-analytic study of previous accounting classifications (perhaps the first metanalytic study of classifications in any domain?). They showed how classification can depend on the mindsets of those doing the classifying, the classifiers themselves and the characteristics that they choose can affect classification and how classification can therefore change dramatically over time without the objects changing. However, despite the arbitrariness, some classifications can be more reasonable or more useful than others.

4. Criteria for the fruitfulness of classifications

Even if different cultures, societies and domain classify objects differently, their classification does not necessarily provide criteria for how things should be classified e.g. by bibliographical databases. How animals are classified in different cultures is, for example, studied by ethnobiologists (see e.g. [BER 92]). But it is not by studying ethnobiology that biological taxonomists (followed by information scientists) construe biological classification systems. However, by studying different cultures and paradigms, one may realize the subjectivity of one's own classification. This is, for example, very clear in color classification. Biggam wrote:

> "When the colour vocabularies of various languages are considered and compared, the researcher finds that there are many different ways in which humans categorize and "label" colours, resulting in an amazing array of misunderstandings. Monoglot individuals invariably believe that their own colour system is clear and obvious, and they are often mystified when confronted with an alternative system. So the first step which the reader has to take when entering the world of colour semantics is probably the most difficult of all; s/he must restrict his or her own colour system to normal, everyday speech and learn to set it aside when considering foreign or

> historical colour descriptions. The aim is to dispose of any preconceptions about how colour "should" be classified and described, so as to gain insights into the workings of other languages and cultures, and into the nature of colour itself." [BIG 15, p. 1]

Classifications are closely related to theories (classifiers are classifying according to their theories of the domain). Contemporary biological classification is for example related to the theory of evolution (and different from, for example, the classification by Carl Linnaeus based on the theory of creation). An ontological theory implies a theory of what entities exist in the world and how they are connected (ontological commitment). But how, then, are the truth or fruitfulness of theories determined? Materialist and pragmatist metaphysics suggests that our categorizations of the world are practice-laden and they are therefore also, inevitably, value-laden [PIH 09].

5. Conclusion

Durkheim and Mauss raised the problem of the role of the classifier, more precisely his or her social and cultural influences. In other words, we are talking about the role of the classifier, the mindsets of those doing the classifying. I suggest the following four positions:

Positivism and näive realism: The world is as we immediately see it. We classify the world as it is (subjectivity can be and should be eliminated).

Cognitivism and psychologism: The way we classify the world is determined by our given universal biological characteristics.

Sociologism: the classification of things reproduces a pattern of social arrangements of the classifiers rather than a pattern of the things themselves.

Pragmatic realism: The thing themselves cannot be distinguished from human practices. We classify things according to human needs, but still according to how the world is.

To conclude with another French philosopher king:

> "... the cognitive structures which social agents implement in their practical knowledge of the social world are internalized, 'embodied' social structures" [BOU 86, p. 468]

However, these cognitive structures have status like theories that science, criticism and classification research are engaged in evaluating and developing them.

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Fondements épistémologiques et théoriques de la science de l'information-documentation

Hommage aux pionniers francophones

Actes du 11e congrès ISKO France

11 & 12 juillet 2017

Siège de l'UNESCO, Paris

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